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07/937,560 08/31/92 MC GARVEY

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R A-19095
EXAMINER

CUMMINGS, S

ART UNIT PAPER NUMBER

16

2406

DATE MAILED:

07/19/94

This is a communication from the examiner in charge of your application.
COMMISSIONER OF PATENTS AND TRADEMARKS

☐ This application has been examined ☒ Responsive to communication filed on 6/16/94 ☒ This action is made final.

A shortened statutory period for response to this action is set to expire 3 month(s), _____ days from the date of this letter.
Failure to respond within the period for response will cause the application to become abandoned. 35 U.S.C. 133

Part I THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION:

- | | |
|---|---|
| 1. <input type="checkbox"/> Notice of References Cited by Examiner, PTO-892. | 2. <input type="checkbox"/> Notice of Draftsman's Patent Drawing Review, PTO-948. |
| 3. <input type="checkbox"/> Notice of Art Cited by Applicant, PTO-1449. | 4. <input type="checkbox"/> Notice of Informal Patent Application, PTO-152. |
| 5. <input type="checkbox"/> Information on How to Effect Drawing Changes, PTO-1474. | 6. <input type="checkbox"/> _____ |

Part II SUMMARY OF ACTION

1. ☒ Claims 1-23 are pending in the application.

Of the above, claims _____ are withdrawn from consideration.

2. ☐ Claims _____ have been cancelled.

3. ☒ Claims 21 are allowed.

4. ☒ Claims 1-20, 22, 23 are rejected.

5. ☐ Claims _____ are objected to.

6. ☐ Claims _____ are subject to restriction or election requirement.

7. ☐ This application has been filed with informal drawings under 37 C.F.R. 1.85 which are acceptable for examination purposes.

8. ☐ Formal drawings are required in response to this Office action.

9. ☐ The corrected or substitute drawings have been received on _____. Under 37 C.F.R. 1.84 these drawings are ☐ acceptable; ☐ not acceptable (see explanation or Notice of Draftsman's Patent Drawing Review, PTO-948).

10. ☐ The proposed additional or substitute sheet(s) of drawings, filed on _____, has (have) been ☐ approved by the examiner; ☐ disapproved by the examiner (see explanation).

11. ☐ The proposed drawing correction, filed _____, has been ☐ approved; ☐ disapproved (see explanation).

12. ☐ Acknowledgement is made of the claim for priority under 35 U.S.C. 119. The certified copy has ☐ been received ☐ not been received ☐ been filed in parent application, serial no. _____; filed on _____.

13. ☐ Since this application appears to be in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213.

14. ☐ Other

EXAMINER'S ACTION

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Election/Restriction

1. The Restriction requirement of paper #3 (7/6/93) is made FINAL. Applicant is correct in asserting that the inner diameter of the gasket of figs. 2 and 6 is initially smaller than the adjacent tubular members. The Examiner's previous reference to this diameter as being "greater" than the inner diameters of the tubular members was erroneous, however, this error does not stem from a misinterpretation of the claims. As stated in ¶1 of paper #2, "[u]pon tightening to form a seal, the inner diameter of the gasket is forced radially outward so that its diameter is "equal" to the inner diameters of the tubular members". The Examiner disagrees with Applicant's assertion on pg. 2 of the current response that claims which use the term "substantially equal" encompass the species in which the diameters are "equal". Such an interpretation is inconsistent with the definition and use of the term "substantially equal" in the specification and on pg. 2 of the previous response filed 7/21/93 (paper #5).

Claim Rejections - 35 USC § 112

2. The previous rejection set forth in ¶2 of paper #6 is withdrawn.
3. Claims 1-18 and 22 are finally rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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As evidenced by the previous arguments of record, the scope of claims 1-18 and 22 is in indefinite. Applicant has defined the term "substantially equal" in the specification and his arguments as being applicable to a structure in which the initial diameter of the seal is equal to that of the tubular members, then upon compression the gasket is forced radially outward so that inner diameter of the gasket is slightly greater than the inner diameters of the tubular members (e.g. figs. 15-16). Applicant has differentiated this structure from a second embodiment in which the inner diameter of the gasket is initially smaller than that of the tubular members, and upon compression, the inner diameters of the gasket and tubular members becomes equal (e.g. - figs. 13-14). Applicant now attempts to assign a new meaning to these previously defined terms by asserting that the term "substantially equal" is intended to encompass both embodiments. This assertion being contrary to the specification and to the principle of claim differentiation.

Double Patenting

4. The obviousness-type double patenting rejection is a judicially established doctrine based upon public policy and is primarily intended to prevent prolongation of the patent term by prohibiting claims in a second patent not patentably distinct from claims in a first patent. *In re Vogel*, 164 USPQ 619 (CCPA 1970). A timely filed terminal disclaimer in compliance with 37 C.F.R. § 1.321(b) would overcome an actual or provisional rejection on this ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 C.F.R. § 1.78(d).

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5. Claims 19 and 20 are finally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 6, and 9 of U.S. Patent No. 5,222,747. Although the conflicting claims are not identical, they are not patentably distinct from each other because all features of the present claims have been previously recited in Applicant's prior patent. In particular, the patented claims call for the gasket to be deformed so that "no space is left between the radially inner side of said gasket and said rectilinear profile".

6. Claim 23 is finally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 6, and 9 of U.S. Patent No. 5,222,747 in view of Leigh ('597).

To the extent that the claimed "method" steps of "engaging" and "tightening" are not implicit in the seal structure of the abovementioned claims, Leigh teaches the claimed steps of "engaging" and "tightening" (see column 3) to form a seal of the type claimed.

Therefore it would have been obvious, in view of Leigh, to engage the gasket and tighten the tubular members in order to form an effective seal.

Claim Rejections - 35 USC § 102

7. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

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8. The previous rejection of claims 19 and 20 set forth in ¶7 of paper #6 is withdrawn.
- Claim 23 is finally rejected under 35 U.S.C. § 102(b) as being anticipated by PCT'3495.

PCT'3495 also discloses a sealing structure formed by engaging and tightening that includes a gasket that has beveled sealing faces (24', 24) that are engaged by sealing bead formations that will urge the gasket radially outward. The resulting seal (fig. 2) has "minimum" dead volume.

NOTE: Claims 19 and 20 are viewed as being adequately supported by the disclosures of the parent applications, therefore these claims are afforded the filing dates of these applications (the earliest of which being 8/11/89). Claims 21 and 23 are not viewed as being adequately supported by the disclosures of the parent applications, therefore the effective filing date of this claim is 8/31/92. See, M.P.E.P. §201.11.

Claim Rejections - 35 USC § 103

9. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
10. Claims 19, 20, and 23 are finally rejected under 35 U.S.C. § 103 as being unpatentable over Leigh ('597) in view of White.

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This rejection is set forth in ¶5 of the office action mailed 3/30/90 in parent application 392,460. This rejection, and the comments associated therewith, are incorporated herein by reference.

Leigh discloses a seal structure and the claimed method steps of engaging and tightening, but does not disclose the minimization or elimination of dead volumes by making the inner diameter of the gasket equal to the inner diameters of the tubular members.

White teaches minimization or elimination of dead volumes by providing a sealing structure in which the inner diameter of the sealing gasket is equal to the inner diameter of the tubular members.

Therefore it would have been obvious, in view of White, to provide the claimed sealing structure in which the inner diameters of the gasket and tubular members are equal in order to minimize or eliminate zero dead volumes.

Response to Amendment

11. Applicant's arguments filed 1/10/94 have been fully considered but they are not deemed to be persuasive.

Applicant traverses the double patenting rejection of claims 19 and 20 on the grounds that the **patented claims** recite an annular beveled surface and the present claims do not. This argument is not found persuasive because it is immaterial whether the patented claims recite **more** structural features than is presently being claimed.

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Applicant traverses the double patenting rejection of claim 23 on grounds that the specification of patent '747 is not available as prior art. The Examiner agrees with this assertion. However, claim 23 was not rejected as being obvious over claims 1, 6, and 9 of USP '747 in view of its own specification. As stated in ¶4 of paper #6, claim 23 is rejected under the doctrine of obvious-type double patenting as being obvious over claims 1, 6, and 9 in view of Leigh. Leigh (USP 4,854,597) embodies the acknowledged prior art as discussed on pgs. 1-2 of the specification and has been consistently referred to in office actions issued in the present application as well as office actions issued over the last 4+ yrs. for related applications, as evidenced by Applicants discussion of this reference's use in the §103 rejection on pgs. 3-4 of the current response.

Applicant traverses the rejection of claim 23 over PCT'3495 on grounds that PCT'3495 does not disclose the specific tightening step of claim 23, and that there is no evidence that the inner diameter of the PCT gasket is at any time different from the inner diameter of the tubing. First, claim 23 does not recite such a difference in diameter (i.e.- the initial diameter could be "equal" to the tubing then slightly enlarged due to the tightening pressure, and still be "substantially equal" to the diameter of the tubing). Second, PCT'3495 discloses that the end formations of the fitting act to center the gasket and that the end formations may engage the beveled surface of the gasket before the "plane coronal parts come into contact". This disclosed tightening behavior is capable of pushing the gasket radially outward.

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Allowable Subject Matter

12. Claim 21 is allowable of the prior art of record.

Conclusion

13. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 C.F.R. § 1.136(a).

A SHORTENED STATUTORY PERIOD FOR RESPONSE TO THIS FINAL ACTION IS SET TO EXPIRE THREE MONTHS FROM THE DATE OF THIS ACTION. IN THE EVENT A FIRST RESPONSE IS FILED WITHIN TWO MONTHS OF THE MAILING DATE OF THIS FINAL ACTION AND THE ADVISORY ACTION IS NOT MAILED UNTIL AFTER THE END OF THE THREE-MONTH SHORTENED STATUTORY PERIOD, THEN THE SHORTENED STATUTORY PERIOD WILL EXPIRE ON THE DATE THE ADVISORY ACTION IS MAILED, AND ANY EXTENSION FEE PURSUANT TO 37 C.F.R. § 1.136(a) WILL BE CALCULATED FROM THE MAILING DATE OF THE ADVISORY ACTION. IN NO EVENT WILL THE STATUTORY PERIOD FOR RESPONSE EXPIRE LATER THAN SIX MONTHS FROM THE DATE OF THIS FINAL ACTION.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott W. Cummings whose telephone number is (703) 308-0791.


Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0771.

S.C.

Scott W. Cummings

July 16, 1994

Patent Examiner


WILLIAM A. CUCHLINSKI, JR.
SUPERVISORY PATENT EXAMINER
ART UNIT 2406